

Title (en)  
IGNITION CIRCUIT AND VEHICLE LAMP

Title (de)  
ZÜNDSCHALTUNG UND FAHRZEUGLEUCHTE

Title (fr)  
CIRCUIT D'ALLUMAGE ET PHARE DE VÉHICULE

Publication  
**EP 4094987 A1 20221130 (EN)**

Application  
**EP 21744518 A 20210113**

Priority  
• JP 2020006923 A 20200120  
• JP 2021000853 W 20210113

Abstract (en)  
An automotive lamp includes a temperature-sensing element having an electrical state that changes according to the temperature T of a semiconductor light source, and a constant current driver that generates a driving current  $I_{LED}$  that corresponds to the temperature T. The maximum value of the temperature differential of the driving current  $I_{LED}$  in a first temperature range from a reference temperature  $T_0$  to a first temperature  $T_1$  ( $T_1 > T_0$ ) is smaller than the maximum value of the temperature differential of the driving current  $I_{LED}$  in a second temperature range from the first temperature  $T_1$  to a second temperature  $T_2$  ( $T_2 > T_1$ ).

IPC 8 full level  
**B60Q 1/00** (2006.01); **B60Q 1/30** (2006.01); **B60Q 1/44** (2006.01)

CPC (source: EP US)  
**F21S 43/14** (2018.01 - EP); **F21S 45/10** (2018.01 - EP); **F21S 45/47** (2018.01 - EP); **H05B 45/18** (2020.01 - EP US); **H05B 45/345** (2020.01 - EP US); **H05B 45/395** (2020.01 - EP)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**EP 4094987 A1 20221130**; **EP 4094987 A4 20230607**; CN 115210110 A 20221018; JP 7524229 B2 20240729; JP WO2021149558 A1 20210729; US 12048073 B2 20240723; US 2022353966 A1 20221103; WO 2021149558 A1 20210729

DOCDB simple family (application)  
**EP 21744518 A 20210113**; CN 202180010164 A 20210113; JP 2021000853 W 20210113; JP 2021573089 A 20210113; US 202217867870 A 20220719